

WHAT IS CLAIMED IS:

1. A method of noise reduction for a transceiver transmitting
5 frames over a transmission medium in a frame-based communications
network comprising:

providing a transceiver transmit path and a transceiver
receive path;

locating a blocking switch in the transceiver transmit path,
10 the blocking switch allowing transmit signal propagation when
enabled, while preventing both transmit signal propagation and
circuit device noise coupling from the transceiver transmit path
to the transceiver receive path when the blocking switch is
disabled; and

15 disabling the blocking switch when the transceiver transmit
path is not transmitting frames over the frame-based
communications network.

2. The method of Claim 1, wherein the circuit device noise
20 coupling from the transceiver transmit path to the transceiver
receive path is through a transformer providing conversion from
four wire transmit receive lines to a two wire line.

3. The method of Claim 1, wherein the block switching is
25 located proximate to the transmission medium.

4. The method of Claim 3, wherein the transmission medium is
a twisted pair wire.

30 5. The method of Claim 4, wherein the twisted pair wire is a
telephone line.

6. A switch apparatus for providing noise reduction for a
transceiver transmitting frames over a transmission medium in a
35 frame-based communications network, the transceiver having a

transceiver transmit path and a transceiver receive path, comprising:

5 a blocking switch locatable in the transceiver transmit path, the blocking switch having an input port and an output port allowing transmit signal propagation through the blocking switch and along the transceiver transmit path when enabled, the blocking switch further including enable/disable control to
10 disable the blocking switch when the transceiver transmit path is not transmitting frames over the frame-based communications network preventing both transmit signal propagation and circuit device noise coupling from the transceiver transmit path to the transceiver receive path when the blocking switch is disabled.

15 7. The switch apparatus of Claim 6, wherein the circuit device noise coupling from the transceiver transmit path to the transceiver receive path is from the output port through a transformer providing conversion from four wire transmit receive
20 lines to a two wire line.

8. The switch apparatus of Claim 6, wherein the output port of the block switch is locatable proximate to the transmission medium.

25 9. The switch apparatus of Claim 8, wherein the transmission medium is a twisted pair wire.

30 10. The switch apparatus of Claim 9, wherein the twisted pair wire is a telephone line.